IN THE CLAIMS:

6. (Amended) The eukaryotic cell of claim 1 wherein a cytoplasmic part of the chimeric receptor is a cytoplasmic part of at least one interferon receptor subunit.

11. (Thrice Amended) A method of screening a compound that inhibits the binding of a ligand with the extracellular part of a chimeric receptor and/or with the signaling pathway of the cytoplasmic part of a chimeric receptor, the method comprising: providing the eukaryotic cell of claim 1; contacting said eukaryotic cell with said compound; and

contacting said eukaryotic cell with said compound; and selecting cells in which the cell's reporter system is inactivated.

15. (Twice Amended) A method of screening for an orphan receptor and its unknown ligands comprising:

providing a eukaryotic cell comprising:

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- a first recombinant gene encoding a chimeric receptor;
- a library of recombinant genes encoding at least one compound, the expression of which creates an autocrinic loop;
- a reporter system that is activated upon the creation of said autocrinic loop; and selecting cells in which the cell's reporter system is activated.
- 16. (Amended) The method according to claim 24 wherein said series of compounds comprise genes encoding said antagonists.
- 17. (Amended) The method according to claim 16 wherein said antagonists create the autocrinic loop.
- 18. (Amended) The method according to claim 15 wherein said unknown ligands are produced by the autocrinic loop.

Please add the following new claim:

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24. (New) A method of screening for antagonists interfering with ligand-receptor binding comprising:

providing a eukaryotic cell comprising:

- a first recombinant gene encoding a chimeric receptor;
- a second recombinant gene encoding a compound, the expression of which creates an autocrinic loop;
- a reporter system that is activated upon the creation of said autocrinic loop; reacting a series of compounds with said eukaryotic cell; assaying the activity of each compound of said series of compounds; and based on said assaying, determining the presence of an antagonist.

Please cancel claim 19 without prejudice or disclaimer.